

REMARKS/ARGUMENTS

Claims 13-40 are pending. Independent Claim 13 tracks and finds support in original Claim 8. Claim 14 tracks Claim 6. Claims 15 and 16 also find support in original Claim 6 and in the specification on page 14, last paragraph. Claim 17 finds support in the specification on pages 8-10. Claim 18 also finds support in the specification on the fourth line from the bottom of page 10. Claims 19-21 track and find support in original Claims 3-5. Claim 22 tracks original Claim 1. Claims 23-28 track and find support in original Claim 2. Claims 29 and 30 find support in the specification at page 6, lines 7-19, on page 18, line 16 and on page 23. Claims 31 and 32 find support on page 1, lines 4-20, page 6, lines 7-19, and page 23, last few lines. Claims 33 and 34 track and find support in original Claim 7. Claims 35-40 find support in original Claims 9-12 and as indicated above for the method claims. Claim 37 refers to pFP1. This plasmid has been deposited under the terms of the Budapest Treaty as shown on the attached deposit receipt. Claim 40 also finds support on page 23 of the specification. Accordingly, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Leary for the courteous and helpful interview of November 17, 2003. The differences between the oxidase of the present invention, which reacts with glycated peptides to produce hydrogen peroxide, and prior art oxidases, which react with glycated amino acids, were discussed. These differences are explained below in the context of the prior art. It was suggested that the claim set be revised to more clearly set forth each method step of the claimed methods. The new method claims reflect these revisions. Accordingly, favorable consideration is now requested.

Rejection—35 U.S.C. 102(b)

Claims 1, 6, 8 and 9 were rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternatively, under 35 U.S.C. 103(a) as being unpatentable over Yonehara et al., JP 9-324732 (JP 11-155596 A, June 15, 1999). The Applicants submit that this rejection is moot in view of the cancellation of these claims. It would not apply to new Claim 13, which requires treating a sample with an oxidase that reacts with a glycated peptide. Yonehara, see English Abstract, discloses treating a saccharified protein with a protease and then treating with a fructosyl amino acid oxidase (FAOD). However, the method of the present invention requires the use of an oxidase which reacts with a glycated peptide. Yonehara neither discloses with sufficient specificity any such oxidase reactive with a glycated peptide, nor does it suggest that one select such an oxidase.

The use and selection of an oxidase reactive with a glycated peptide provides important benefits absent from prior art processes which use fructosyl amino acid oxidase as explained, for instance, on page 2 of the specification:

Currently some glycated proteins cannot be decomposed to quantitatively liberate a glycated amino acid even with the use of conventional protease. In addition, the above-described **fructosyl amino acid oxidase**, which is currently employed, has a high reactivity to a liberated glycated amino acid although it does not substantially react with a glycated peptide.

Thus, the selection and use of an oxidase which does react with **glycated peptides** distinguishes the present invention from the method of Yonehara. Accordingly, Yonehara neither anticipates nor renders obvious the present invention, and the Applicants respectfully submit that this ground of rejection would not apply to the present claims.

Allowable Subject Matter

The Applicants thank Examiner Leary for indicating that the subject matter of Claims 2-5, 7 and 10-12 is otherwise allowable. New Claims 19-21 and 23-28 track these claims and should also be allowable.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Thomas M. Cunningham
Registration No. 45,394

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)

TMC:tmc



(Translation)

INTERNATIONAL FORM

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT

issued pursuant to Rule 7.1 by the
INTERNATIONAL DEPOSITARY AUTHORITY
identified at the bottom of this page.

TO DEPOSITOR:

Name: Kikkoman Corporation
Representative: Yuzaburo MOGI
Address: 250, Noda, Noda-shi, Chiba

1. IDENTIFICATION OF MICROORGANISM	
Identification Reference Given by the Depositor: (E. coli) DH5 α (pFP1)	Accession Number: FERM BP-7297
2. A SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC POSITION	
The microorganism identified under 1 above was accompanied by a document stating the following item(s). <input type="checkbox"/> A Scientific Property <input type="checkbox"/> Taxonomic Position	
3. RECEIPT AND ACCEPTANCE	
This International Depositary Authority accepts the microorganism identified under 1 above, which was received on September 22, 1999. (date of the original deposit)	
4. RECEIPT OF REQUEST FOR TRANSFER	
This International Depositary Authority received the microorganism under 1 above on September 22, 1999 (date of the original deposit), and received on September 13, 2000, a request for transfer from the original deposit to the deposit under the Budapest treaty. (Transferred from FERM P-17576 deposited on September 22, 1999)	
5. INTERNATIONAL DEPOSITARY AUTHORITY	
Name: National Institute of Bioscience and Human-Technology Agency of Industrial Science and Technology Representative: <u>Shinichi OHASHI</u> (sealed) Dr. DIRECTOR GENERAL. Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken 305-8566, JAPAN Date: September 13, 2000	